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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,362	11/14/2001	Jun Akiyama	70904 (56693)	5592
21874	7590	10/18/2005	EXAMINER	
EDWARDS & ANGELL, LLP			POLTORAK, PIOTR	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	

2134

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/992,362

Applicant(s)

AKIYAMA, JUN

Examiner

Peter Poltorak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 17-24 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The Amendment, and remarks therein, received on 6/24/2005 have been entered and carefully considered.
2. The Amendment introduces new limitations into claims 1-2, 4, 11-12 and 16 and cancels claims 10 and 15. Claims 17-24 are withdrawn from consideration as being drawn to non-elected subject matter.
3. The newly introduced limitation has required a new search and consideration of the pending claims. The new search has resulted in newly discovered prior art. New grounds of rejection based on the newly discovered prior art follow below.
4. Claims 1-9, 11-14 and 16-24 have been examined.

### ***Claim Rejections - 35 USC § 112***

5. Claims 1-9 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.
6. Claim 1 recites: "encrypting the information to record using the encryption information which was reproduced in the second format from the encryption data recording region in the recording medium". This limitation seems to be incomplete as the verb "record" is missing the object (noun). In other words, it is not clear what is recorded using the encrypted information.

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7. Claim 2 recites: "the data recording region of the recording medium is defined to record information in a first format; and the encryption data recording region of the recording medium records encryption information required to encrypt information to be recorded in the data recording region and to reproduce recorded information from the data recording region in a second format which differs from the first format". The limitation is not understood. It is not clear whether applicant suggests that the recorded information can be in a first format as well as a second format or whether the second format is directed towards encryption information.

A similar problem is observed in claim 11.

8. For purposes of further examination the phrase is treated as though the applicant suggests that record encryption information is recorded in the second format. Regardless of whether the examiner is correct with his assumption applicant should find better language to articulate his intention.

9. The term "sole recording means" in claim 11 is not understood. The term is treated as "recording means".

10. Claims 3-9 and 12-14 are rejected by virtue of their dependence.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by *Tosaki et al.* (U.S. Patent No. 6633534).
12. As per claims 1-2 *Tosaki et al.* teach a disk (Fig. 1B) that comprises data area 5 (*first format data recording region*) and lead area 4 (*second format data recording region*).
13. *Tosaki et al.* teach CSS key area disposed in the lead area, which stores key information for deciphering the requisite information, which has been ciphered and recorded in the data area (*col.3 lines 28-62*). The requisite information is deciphered using the key information and reproduced (*col. 4 lines 3-6*).
14. This reads on "encrypted information in the data recording region in the first format and reproducing information by reading out the encrypted information recorded in the data recording region in the first format, and by decrypting the encrypted information using the encryption information which was reproduced from the encryption data recording region in the recording medium in the second format" and on "reproducing information by reading out the encrypted information recorded in the data recording region in the first format, and by decrypting the encrypted information using the encryption information which was reproduced from the encryption data recording region in the recording medium in the second format".
15. *Tosaki et al.* teach that the key area is formed of prepits so that the key information is prevented from copying, and that the modulation factor of each of the prepits in the disk is larger than 30% and the jitter (Data to Clock Jitter) is smaller than or

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equal to 8% (*col. 4 lines 3-14*). *Toasaki et al.* go on with discussion of characteristics of different regions in (e.g.) *col. 7 line 7-col. 9 line 60* and articulate the findings with *Fig. 2-9*.

16. This reads on "recording information in the data recording region in the first format, which differs from the second format in an identical kind of recording system as the encryption data recording region" and on "the first format and the second format differing from each other in at least one of recording density, error correcting system, and defect management system".

17. As per claim 3 it is inherent that recording regions are blank before information is recorded.

18. As per claim 16 *Tosaki et al.* teach that the lead area in addition to prepit section comprise a groove (*col. 3 lines 1-3*).

19. Claims 4-7, 9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Tosaki et al.* (*U.S. Patent No. 6633534*).

20. As per claim 11 *Tosaki et al.*'s invention is directed towards a write-once DVD (*Tosaki et al., Abstract*). However, it is old and well-known practice to use DVDs where information could be written multiple times. One of ordinary skill in the art at the time of applicant's invention would have been motivated to employ such a DVD in order to add additional data into the DVD. Also, it is implicit that recording means for recording information on the recording medium should allow the recording only in the first format and not the second format as *Tosaki et al.* teach that the second

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format region holds information that prevent unauthorized copying (*Tosaki et al.*, *Abstract*).

21. The limitations of claim 4-5 and 12-13 are implicit. Although music, movies and other data (data stored in the data region that is in the first format) come in various quality (e.g. various compression techniques are used to minimize space requirement) while the second format data that is used to decipher the first format data and as a result it must be in perfect reproduction quality.
22. As per claim 6 it is inherent that plurality of information pieces are recorded in a circumferential direction on a disk and it is old and well-known practice to use more than one piece of information for the encryption process for motivation of benefit of increased security.
23. As per claims 9 and 14 *Tosaki et al.*'s invention employs two different areas with data in different formats. Data in different formats modulate differently (because they were modulated differently at the recording time) and as a result when the DVD is read, the player or a computer that reads it must have two different systems to deal with the various formats.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Tosaki et al.* (U.S. Patent No. 6633534) in view of *Oshim et al.* (U.S. Patent No. 6343282).

25. As per claims 8 *Tosaki et al.* teach recording the encryption data recording region as discussed above. *Tosaki et al.* do not teach recording identification information for identifying each recording medium in the encryption data recording region

26. *Oshim et al.* teach unique recording identification information for identifying each recording medium used in the encryption/decryption process (*Oshima et al.*, Abstract).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include identification information for identifying a recording medium in the encryption data recording region as taught by *Oshim et al* into *Tosaki et al.*'s invention. One of ordinary skill in the art at the time of applicant's invention would have been motivated to employ such a modification for tracking purposes.

27. Claims 1-9, 11-14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hirata et al.* (European Pub. No. 0989553A2) in view of *Komma et al.* (European Pub. No. 0610055A2).

28. *Hirata* teaches a record medium (disk, Fig. 4), wherein information (content data) is recorded in a format different from encryption information (characteristic information (DI)). The encryption information are used to encrypt/decrypt the information [62-65]. The encryption information is used to encrypt/decrypt the information [71].

29. *Hirata et al.* teach the information recorded in the first format and the encryption information recorded in the second.



30. *Hirata et al.* do not explicitly teach that the second format is adapted to reproduce information in a condition of better quality than that of the first format and that the recording density of the second format is lower than that of the first format.

31. *Komma et al.* teach two regions with different density, wherein the recording density of the standard information (*recording information*) is higher than that of the distinguishing information (*col. 14 line 55-col 15 line 15*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement different recording densities for each of the recording regions. One of ordinary skill in the art would have been motivated to do so in order to maximize the amount of data recorded on the medium (higher density), while ensuring the highest quality of second region data (lower density) since decrypting data residing in the first region depends on the encryption information and the perfect retrieval of the encryption information is essential to the proper decryption process (*Any deviances in the encryption information from the original would prohibit decoding the content of the disk [Hirata et al. 21]*).

32. *Hirata* teaches the limitation of claim 6 in Fig. 4 and [64], claims 7-8 in [60-61].

33. As per claim 3 it is inherent that recording regions are blank before information is recorded for the first time.

34. *Hirata et al.* teach the limitations of claims 9 and 14 in [65]. The first format modulation differ from the second format modulation [62] and [65].

35. As per claim 16 *Hirata et al.* teach n kinds of regions (*region 1*) and m kinds of recording regions (*regions 2 and 3, Fig. 4 and [63]*).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

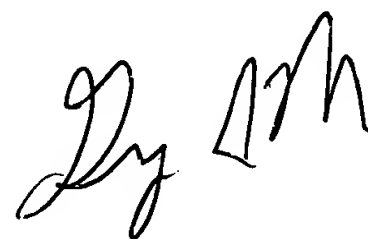
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571)272-3838. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
9/29/05



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